

Nitrogen plant for laser cutting systems

PSAL® - S with a nitrogen purity of 99.999 % (10 – 100 ppm residual oxygen), air factor 5 – 7

AIRCO® Systems GmbH has been very successful in offering both **space-saving** and **effective and convenient complete solutions** for onsite nitrogen generation. The so-called “**PSAL® S - systems**” combine modern **platform construction** with years of experience in the field of **high-purity nitrogen generation**.

The system, including all components, is assembled on the prefabricated, modular **automotive skits** in our production facility in Frankfurt am Main. **Compressed air preparation, nitrogen generator, product container, nitrogen drying, filter** and the **high-pressure compressor** find space on the always identical basic structure.

After completion of the installation, the entire system is approved by our technology and our notified **CE body** and the installation is then retracted. The systems are extensively tested for function and tightness. The settings can already be adapted to the specifications of our customers.

In this way, we enable commissioning at the customer's site in record time and realize the basic idea of the **Plug & Play application**. The loading and positioning, in which no more than one forklift is required, is also characterized by the **compact** design.

Our nitrogen plant is professionally connected to the supply gases for the laser during installation by our trained technicians.

In the last step, our customers receive training directly at their plant by our technicians so that they can plan and monitor their **nitrogen production** themselves in the future.



PSAL® - S NITROGEN GENERATOR

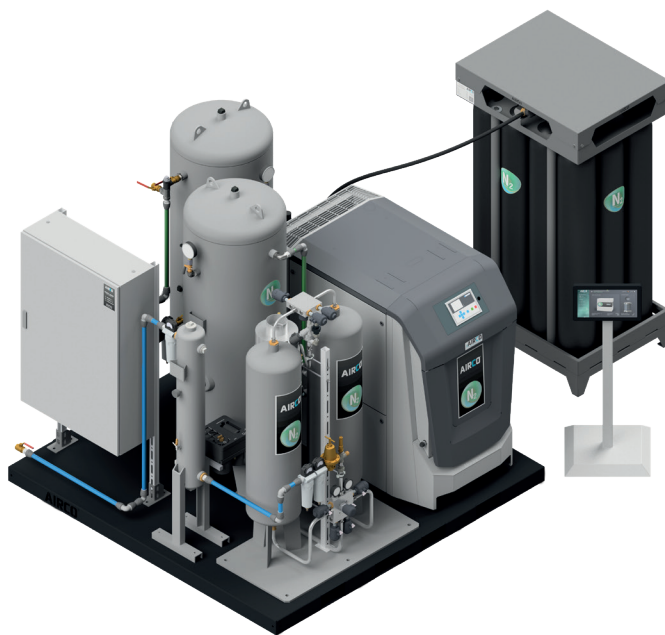
SKIT PLATFORMS – OVERVIEW

Skid platform	Volumetric flow - Nm ³ /h			Platform dimensions LxWxH in mm	Platform weight (approx. in kg)	Total weight (approx. in kg)	Power connection	Bundle (recommendation)
	3.0 (99,9%)	4.0 (99,99%)	5.0 (99,999%)					
PSAL 15 S	15	8	5	2200 x 2200 x 2500	1950	1950	32A	1
PSAL 25 S	25	14	6	2200 x 2200 x 2500	1700	2180	50A	2
PSAL 38 S	38	22	11	2200 x 2200 x 2500	1850	2330	50A	4
PSAL 50 S	48	25	15	2200 x 2200 x 2500	1934	2414	50A	6
PSAL 75 S	75	42	22	2200 x 2200 x 2500	2087	2567	63A	8
PSAL 90 S	90	51	28	2200 x 2200 x 2500	2593	3073	63A	8

* High-pressure compressor separately next to the platform (1500 x 800 x 1530 mm, 480 kg)

SPECIFICATIONS / DATA

- Outlet pressure max. 300 bar
- Ambient air +10 °C to +45 °C
- Nitrogen temperature +10 °C above ambient temperature
- Nitrogen purity 3.0 = 1000 ppm
- Highest purity 5.0 = 10 ppm



BENEFITS

- Plug & Play, tested on over 6000 systems worldwide
- Immediately operational
- Low maintenance effort
- High quality & worldwide service
- Air requirement factor 5 – 7
- Purity at 10 – 1000 ppm, 5.0 – 3.0

HIGHLIGHTS

- Small footprint and easy handling
- Extremely low power consumption
- Extremely low air consumption
- Better cutting results than tank and bundle solutions
- Industry 4.0, query & control of the system from anywhere in the world



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